Job Report LRB 355 with Full Displacement Drilling Equipment









Situation

No life without water. Even although two thirds of the earth consists of water, it is necessary to utilize this resource with consideration. The project "PTAR Salitre" in the Colombian capital of Bogotá is well aware of this responsibility. Through the expansion of the waste water treatment plant "El Salitre" they are trying to reduce the contamination of the Río Bogotá

through the treatment of waste water. The river rises to the north of Bogotá and becomes a famous attraction shortly after El Charquito. Here the water spectacularly plunges 150 m at the waterfall "Salto del Tequendama". Unfortunately, it is also one of the most contaminated rivers in South America.

Project

Thanks to the improvements, the amount of water treated can be nearly doubled. One of the contractors, the local company Botero Ingenieros, is successfully applying the piling and drilling rig LRB 355 from Liebherr for the foundation work. The LRB 355 is installing 1,879 foundation piles using full displacement drilling equipment. In the course of

Solution

Following treatment in El Salitre, the water flows into the Río Bogotá. After the development is completed, the contamination can be reduced to a level that can be managed by the whole project it will drill a total of 62,000 metres into the deep. The piles have a diameter of 600 mm and reach depths between 31 and 36 m. Due to the impressive performance of the Liebherr machine, Botero Ingenieros can complete the work in only 8 months. Construction started in March 2018.

the river itself. Due to the reduced contamination, the water can be sensibly reused in future, e.g. for grazing animals or agricultural purposes.

Technical Data – LRB 355 with Full Displacement Drilling Equipment:

Operation weight:	95.3 t	Engine power:	750 kW
Max. torque:	450 kNm	Max. drilling depth:	36.0 m
Max. crowd force:	400 kN	Max. drilling diameter:	600 mm